

What is claimed is:

1. A parking lock for a brake of a vehicle, preferably a heavy road vehicle, which parking lock has the form of a unit surrounding a piston rod (2) of a service brake actuator (18), which parking lock unit comprises an electrically actuated locking means, characterized in that the parking lock unit comprises a magnetic housing (5), enclosing an electromagnet (9) and a number of jaws (7, 35), moveable in a radial direction in the parking lock unit.
2. The parking lock of claim 1, characterized in that the locking means is self-locking.
3. The parking lock of any of the previous claims, characterized in that the piston rod (2) is received in a central opening of the parking lock unit and that the piston rod (2) is axially moveable in relation to the parking lock unit.
4. The parking lock of any of the previous claims, characterized in that the jaws (7, 35) received in the magnetic housing (5) form a ring surrounding the piston rod (2).
5. The parking lock of any of the previous claims, characterized in that a ring (31) is received in the magnetic housing (5), which ring (31) is made of a magnetically isolating material and is facing the jaws (7, 35) and/or that each jaw (7, 35) has a conical surface (15) for co-operation with a conical surface (16) of the magnetic housing (5) or a conical surface (32) of the ring (31).

6. The parking lock of any of the previous claims, **characterized** in that coils forming the electromagnet (9) are received in a circular recess (26) in the magnetic housing (5).

7. The parking lock of any of the previous claims, **characterized** in that the jaws (7, 35) have grooves (10) on the side turned towards the piston rod (2) and that the piston rod (2) has grooves (3) on the outer periphery and in the area for the parking lock unit and/or that the magnetic housing (5) and the jaws (7, 35) are made of a magnetic material.

8. The parking lock of claim 7, **characterized** in that the grooves (3, 10) of the piston rod (2) and the jaws (7, 35), respectively, have the form of threads.

9. The parking lock of any of the previous claims, **characterized** in that the parking lock unit comprises three to six jaws (7, 35) and preferably three jaws (7, 35) evenly distributed around the piston rod (2).

10. The parking lock of any of the previous claims, **characterized** in that jaw return springs (11) are placed between adjacent jaws (7, 35) to urge the jaws (7, 35) radially outwards.

11. The parking lock of any of the previous claims, **characterized** in that an annular tension spring (27) is arranged to urge the jaws (7, 35) radially inwards.

12. The parking lock of any of the previous claims, **characterized** in that the magnetic housing (5) is urged against a domed part (14) by means of a spring (4), which is acting between a shoulder (13) of the magnetic housing (5) and an outer housing (1) of the parking lock unit, whereby any radial

movement of the piston rod (2), caused by a lever of the brake acting on the piston rod (2), is taken up by movement between the magnetic housing (5) and the domed part (14).

13. The parking lock of any of the previous claims, **characterized** in that a plate (34) of a magnetic material is placed in a recess on the jaws (35) and that the plate (34) has a radial extent corresponding to the position of the electromagnet (9).

14. The parking lock of any of the previous claims, **characterized** in that the piston rod (2) is formed of two parts, which are axially moveable in respect of each other, and whereby one of the parts of the piston rod (2) is free to move axially even if the other part is locked by the parking lock.